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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/624,634

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Kyung-Geun Lee

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EXAMINER

LAMB, CHRISTOPHER RAY

ART UNIT

PAPER NUMBER

2627

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/624,634	Applicant(s) LEE ET AL.	
	Examiner Christopher R. Lamb	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3 total</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-14, 22-24, and 28-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo (US 5,177,720).

Regarding claim 1:

An optical information storage medium (Fig. 8), comprising:

a user data area (column 4, lines 1-15); and

an area other than the user data area (column 4, lines 1-15), comprising:

a reproduction-only area (it is a write-once disc, so any area already written to is a reproduction-only area); and

a recordable area wherein new data about a disk state is recorded in the recordable area every time a recording of user data is stopped (column 7, lines 35-55).

Regarding claim 2:

In Kondo the new data about the disk state is one or more data selected from an address of an area containing newly recorded optimum power control data, an address of an area containing most recently recorded drive data, and an address of an area containing most recently recorded user data, or data representing whether an additional

Art Unit: 2627

recording after the recording of user data is possible (it is the address of the area containing most recently recorded user data: column 7, lines 35-55).

Regarding claim 3:

In Kondo the area other than the user data area corresponds to the lead-in area, and the new data about the disk state is recorded in the recordable area as part of the lead-in area (column 7, line 65 to column 8, line 25).

Regarding claim 4:

In Kondo, when data about the disk state is updated, the new data about the disk state is recorded in an area next to an area containing most recently recorded disk state data (column 7, line 65 to column 8, lines 25).

Regarding claim 5:

In Kondo, when data about the disk state is recorded as a combination of bits of at least one byte (inherent: the address must be at least a byte long).

Regarding claim 6:

In Kondo, the area other than the user data area corresponds to a lead-in area, and the recordable area where the new data about the disk state is recorded is a part of the lead-in area (column 7, line 65 to column 8, line 25).

Regarding claim 7:

In Kondo, when data about the disk state is updated, the new data about the disk state is recorded in an area next to an area containing most recently recorded disk state data (column 7, line 65 to column 8, line 25).

Regarding claims 8-14:

Art Unit: 2627

These are method claims corresponding to medium claims 1-7. All elements positively recited have already been discussed with regards to those earlier claims.

Regarding claim 22:

Kondo discloses a method of accessing an area on an optical storage medium where new data is to be recorded, comprising:

predetermining an area of a recordable area of the optical storage medium as a predetermined area (column 7, line 55 to column 8, line 25);

recording in the predetermined area an address corresponding to an area of the optical storage medium where data has been most recently recorded (column 7, line 15 to column 8, line 25); and

reproducing from the predetermined area the recorded address of the area of the optical storage medium where the data has been most recently recorded (column 7, line 15 to column 8, line 25).

Regarding claim 23:

In Kondo the most recently recorded data is one or more of user data and drive data (it is user data).

Regarding claim 24:

The method of Kondo further comprises recording data in the predetermined area representing at least one of a possibility or an impossibility of additional recording on the optical storage medium (the is inherent, because Kondo records the address of the last interrupted point: because the disc is a fixed size, the address in and of itself it enough to determine if additional recording is possible).

Art Unit: 2627

Regarding claim 28:

Kondo discloses a method of organizing a recording of updated data on an optical information storage medium, comprising:

recording in a recordable area new disk state data in a different area of the recordable area than present disk state data (column 7, line 65 to column 8, line 25);
and

recording in the recordable area data representing the possibility of additional recording after completion of recording is recorded (this is inherent, as discussed in the rejection of claim 24),

wherein new data about a disk state is recorded in the recordable area every time a recording of user data is stopped (column 7, lines 35-55).

Regarding claim 29:

In the method of Kondo, the different area of the recordable area is an area next to the area of the recordable area where the present disk state data is most recently recorded (column 7, line 65 to column 8, line 25).

3. Claims 1, 8, 15, 17, 19, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukushima et al. (US 2001/0036136; cited in IDS).

Regarding claim 1:

Fukushima discloses:

An optical information storage medium (Fig. 1, 2), comprising:

a user data area (Fig. 1: 105); and

an area other than the user data area, comprising:

Art Unit: 2627

a reproduction-only area (Fig. 2: 202); and

a recordable area (Fig. 2: 204) wherein new data about a disk state is recorded in the recordable area every time a recording of user data is stopped (in Fukushima, paragraph 204, new data about a disk state is recorded in the recordable area every time new data is recorded: since recording involves both starting and stopping, new data is recorded for every time recording is stopped).

Regarding claim 15:

Fukushima discloses wherein the recordable area comprises:

an optimum power control zone to record data for optimum power control (Fig. 4: 409);

a disk zone to record data about the disk states (this could be any part of all of Fig. 4); and

a drive zone to record drive-related data (Fig. 4: 408).

Regarding claims 8 and 17:

These are method claims corresponding to claims 1 and 15 and are similarly rejected.

Regarding claims 19 and 25:

All elements positively recited have already been discussed with regards to claims 1 and 15.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2627

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16, 18, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukushima et al.

Regarding claim 16:

Fukushima discloses an optical storage medium as described above.

Fukushima does not disclose "wherein each of the disk zone and the drive zone is comprised of 1000 or more physical clusters."

It would have been obvious to one of ordinary skill in the art to include in Fukushima wherein each of the disk zone and the drive zone is comprised of 1000 or more physical clusters.

The motivation would have been optimization in the course of routine engineering of the disk and drive zone. Moreover, absent a showing of criticality, i.e., unobvious or unexpected results, the relationship as set forth in claim 16 is considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range(s); see *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions; see *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

Regarding claim 18:

This is a method claim corresponding to claim 16, and is similarly rejected.

Regarding claim 25:

This is essentially the same as claim 16 and is likewise rejected.

6. Claims 19-21, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo in view of Fukushima.

Regarding claim 19:

Kondo discloses an optical information storage medium as discussed above.

Kondo does not disclose:

an optimum power control zone to record data for optimal power control; and
a drive zone to record drive-related data.

Fukushima discloses an optimum power control zone to record data for optimal power control and a drive zone to record drive-related data (Fig. 4).

It would have been obvious to include in Kondo an optimum power control zone to record data for optimal power control and a drive zone to record drive-related data, as taught by Fukushima.

The motivation would have been to obtain more appropriate recording and reproducing conditions (Fukushima paragraph 85).

Regarding claims 20-21:

Kondo discloses wherein data about the disc space comprises an address of an area where the last user data has been recorded, and data data representing whether additional recording is possible after the user data is recorded (discussed in earlier rejections).

Fukushima teaches the optimum power control data and drive information as discussed above. Fukushima does not teach recording the address of these two areas.

However, it is not necessary for Fukushima to teach this, because it is already inherent to Kondo. Therefore, given Kondo in view of Fukushima it would have been obvious to one of ordinary skill in the art to record an address of an area containing new optimum power control data and an address of an area where the last drive information has been recorded.

The rationale is as follows: Kondo records the address of the user data in order to speed up access to it. When more data (the power control data and the drive information) is added to Kondo, it is logical for Kondo to record the address of it as well for the same reasons.

Regarding claims 25 and 27:

These claims are similar to claims 19-21 and are rejected for the same reasons.

Response to Arguments

7. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

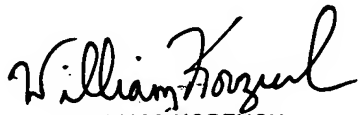
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bakx (US 5,226,027); Takahashi (US RE38,602 E); Kuroda et al. (US 6,028,834).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (572) 272-5264. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRL 8/22/06


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